Ecotourism: understanding competing expert and academic definitions

Y.E. Acheson-Yi and A.M. Wellstead

The Canadian Forest Service's Northern Forestry Centre is responsible for fulfilling the federal role in forestry research and technology transfer in Alberta, Saskatchewan, Manitoba, Nunavut, and the Northwest Territories. The main objective is research in support of improved forest management for the economic, social, and environmental benefit of all Canadians.

The Northern Forestry Centre is one of five centers of the Canadian Forest Service, which has its headquarters in Ottawa, Ontario.

The Foothills Model Forest is one of eleven Model Forests that make up the Canadian Model Forest Network. The Foothills Model Forest is located in Hinton, Alberta and is a non-profit corporation representing a wide array of industrial, academic, government, and non-government partners. The three principal partners/sponsors representing the agencies with vested management authority for the lands that comprise the Foothills Model Forest include Weldwood of Canada Limited (Hinton Division), the Alberta Department of Environmental Protection, and Jasper National Park. The Model Forest lands encompass a combined area of more than 2.75 million hectares under active resource management.

The Canadian Forest Service of Natural Resources Canada is also a principal partner in each of the eleven Model Forest organizations and provides the primary funding and administrative support to Canada's Model Forest Program.

The Foothills Model Forest is a unique community of partners dedicated to providing practical solutions for stewardship and sustainability of our forest lands.

Le Service canadien des forêts, Centre de foresterie du Nord, représente le gouvernement fédéral en Alberta, en Saskatchewan, au Manitoba, au Nunavut et dans les Territoires du Nord–Ouest en ce qui a trait aux recherches forestières et au transfert de technologie. Cet organisme s'intéresse surtout à la recherche en vue d'améliorer l'aménagement forestier afin que tous les Canadiens puissent en profiter aux points de vue économique, social et environnemental.

Le Centre de foresterie du Nord constitue l'un des cinq établissements du Service canadien des forêts, dont l'administration centrale est à Ottawa (Ontario).

La forêt modèle de Foothills est l'une des onze forêts formant le réseau canadien des forêts modèles. Basée à Hinton en Alberta, la forêt modèle de Foothills est une corporation à but non lucratif représentant une large gamme de partenaires provenant des milieux industriels, éducatifs, universitaires et gouvernementaux. Les trois principaux partenaires ou commanditaires qui détiennent une responsabilité sur l'aménagement des terres comprises dans le territoire de la forêt modèle sont Weldwood of Canada Ltd (Division de Hinton), le ministère de la protection de l'environnement de l'Alberta et le parc national de Jasper. Les terres de la forêt modèle s'étendent sur plus de 2,75 millions d'hectares faisant l'objet d'un aménagement actif.

Le Service canadien des forêts de Ressources naturelles Canada est également partenaire principal de chacune des onze forêts modèles, et il fournit l'essentiel du financement et de l'appui administratif au programme des forêts modèles du Canada.

La forêt modèle Foothills est un partenariat extraordinaire devoué à fournir des solutions pratiques envers la gestion durable de nos forêts.

Cover photograph courtesy of Bonita McFarlane, Canadian Forest Service.

ECOTOURISM: UNDERSTANDING THE COMPETING EXPERT AND ACADEMIC DEFINITIONS

Y.G. Rahemtulla and A.M. Wellstead

INFORMATION REPORT NOR-X-380

Canadian Forest Service
Northern Forestry Centre

2001

© Her Majesty the Queen in Right of Canada, 2001
Catalogue no. Fo46-12/380E
ISBN 0-662-31082-9
ISSN 0704-7673

This publication is available at no charge from:

Natural Resources Canada
Canadian Forest Service
Northern Forestry Centre
5320 – 122 Street
Edmonton, Alberta T6H 3S5

A microfiche edition of this publication may be purchased from:

Micromedia Ltd.
240 Catherine Street, Suite 305
Ottawa, Ontario K2P 2G8

National Library of Canada cataloguing in publication data

Rahemtulla, Y.G. (Yasmin Gillian), 1972-

Ecotourism: understanding the competing expert and academic definitions

(Information report ; NOR-X-380)
Includes an abstract in French.
On cover : Foothills Model Forest.
Includes bibliographical references.
ISBN 0-662-31082-9
Cat. No. Fo46-12/380E

1. Ecotourism.
2. Ecotourism -- Canada.
I. Wellstead, A.M. (Adam Matthew), 1967-
II. Northern Forestry Centre (Canada)
III. Foothills Model Forest.
IV. Title.
V. Series: Information report (Northern Forestry Centre (Canada)) ; NOR-X-380.

G155.A1R33 2001 338.4'791 C2001-980282-X

This report has been printed on Canadian recycled paper.

Rahemtulla, Y.G.; Wellstead, A.M. 2001. *Ecotourism: understanding the competing expert and academic definitions*. Nat. Resour. Can., Can. For. Serv., North. For. Cent., Edmonton, Alberta and Foothills Model Forest, Hinton, Alberta. Inf. Rep. NOR-X-380.

ABSTRACT

Ecotourism has become an attractive tourism-related activity for communities and conservationists across Canada. It provides an alternative source of income for communities, thereby diversifying their economies. It appeals to conservationists because it entails fewer cultural and environmental disruptions than other forms of tourism (such as adventure tourism, mass tourism, and nature tourism). Despite the increased focus on ecotourism, there is considerable debate about its definition. In this report we present and explore the competing definitions of this term, and introduce a working definition of ecotourism. We then examine ecotourism as a product and market segment and review the ecotourism market and profile. Finally, we examine applications and practices of ecotourism, with an emphasis on Canadian ecotourism studies.

RÉSUMÉ

L'écotourisme est devenu une activité touristique intéressante pour les collectivités et les défenseurs de l'environnement à travers le Canada. Il fournit une autre source de revenus aux collectivités, diversifiant ainsi leur économie. Il plaît aux défenseurs de l'environnement parce qu'il entraîne moins de ruptures culturelles et environnementales que les autres formes de tourisme (comme le tourisme d'aventure, le tourisme de masse et le tourisme nature). Malgré l'intérêt accru du public pour l'écotourisme, il y a un débat considérable autour de sa définition. Dans ce rapport, nous présentons et explorons les définitions de ce terme qui se font concurrence et présentons une définition ad hoc de l'écotourisme. Nous examinons ensuite l'écotourisme comme produit et segment de marché et passons en revue le profil et le marché de l'écotourisme. Finalement, nous examinons les applications et les pratiques de l'écotourisme, avec l'accent sur les études canadiennes en écotourisme.

102-03263/

CONTENTS

INTRODUCTION 1

BACKGROUND 1
- The History of Ecotourism 1
- The Attractions of Ecotourism 2
- Constraints on Ecotourism Development 2
- Objective and Outline of Report 2

LITERATURE REVIEW 3
- Definitions of Ecotourism 3
- Problems in Defining Ecotourism 4

ECOTOURISM AS A PRODUCT AND MARKET SEGMENT 8
- The Ecotourism Market 8
- Market Profile of Ecotourists 9

APPLICATIONS OF ECOTOURISM 11
- International Ecotourism 11
- Ecotourism in Canada 11

CONCLUSION 13

LITERATURE CITED 14

TABLES
1. Definitions of ecotourism in the literature 5
2. Characteristics of ecotourism 7
3. Vacation and leisure activities and their relation to ecotourism 7
4. Estimates of international tourist activity 9
5. Estimated economic impact of international tourists 9
6. Profile of the ecotourist 10

DISCLAIMER

The views, statements, and conclusions expressed and the recommendations made in this report are entirely those of the author(s) and should not be construed as statements or conclusions of, or as expressing the opinions of the Canadian Forest Service, the Foothills Model Forest, or the partners/sponsors of the Foothills Model Forest. The exclusion of certain manufactured products does not necessarily imply disapproval nor does the mention of other products necessarily imply endorsement by the Canadian Forest Service, the Foothills Model Forest, or the partners/sponsors of the Foothills Model Forest.

INTRODUCTION

Tourism is one of the world's biggest economic activities. The World Tourism Organisation (WTO) (1998) estimated that there were approximately 611 million international tourist arrivals worldwide in 1997 excluding same-day visitors. Spending by these tourists was estimated at more than US$425 billion. The Ecotourism Society (1998) has predicted that tourist arrivals will grow by an average of 4.3% a year over the next two decades, while receipts from international tourism will climb by 6.7% a year. In Alberta, annual revenue generated by tourism activities was estimated at $3 billion in 1997 and was projected to reach $3.5 billion in 1998 (Berezowski and Berezowski 1998)[1].

There are many different forms of tourism, such as adventure tourism, mass tourism, nature tourism, and ecotourism. Ecotourism (which has also been characterized as alternative tourism) is a growing phenomenon and has recently come to the forefront for many tour operators, aid agencies, and government officials. Such tourism differentiates itself from mass tourism in several ways. Unlike mass tourism, ecotourism is small in scale, locally controlled, and undisruptive to the local community (Weaver et al. 1995).

BACKGROUND

The History of Ecotourism

Some researchers (Scace et al. 1992) have contended that the term "ecotourism" was first coined in 1983 by Ceballos-Lascurain. However, according to Ashton and Ashton (1993), Higgins (1996), and Fennell and Eagles (1990), the term was first mentioned in the literature by Kenton Miller in 1978. Other early references to ecotourism include the book by Mathieson and Wall (1982) on the impacts of tourism and a report by Romeril (1985). Fennell and Eagles (1990) claimed a longer history, suggesting that Hetzer (1965) was probably the first to use the term ecotourism. Fennell and Eagles (1990) went on to say that Ceballos-Lascurain (1983) should be credited with first using the term "under the guise of industry connotation, which represents the goods and services and infrastructure required to support the ecotourism industry." Card and Johnson Vogelsong (1994) stated that the concept of ecotourism originated within the responsible tourism movement of the 1970s and was a reaction to cultural spoliation, economic incongruities, and the destruction of natural resources. Environmental tourism in the 1980s led to what is now known as ecotourism (Boo 1990). Boo (1990) cited two global trends that furthered interest in ecotourism: increasing demand for tours of ecologically protected areas and growing awareness of the need to integrate natural resource conservation with the economic needs of rural populations, who rely on these resources.

Ecotourism is an amalgam of interests arising out of environmental, economic, and social concerns. It incorporates both a strong commitment to nature and a sense of social responsibility. However, a precise definition of ecotourism as a term or concept remains to be formulated. Such a definition is needed if planners are to separate ecotourism experiences from other tourism experiences, thereby "permitting the significance of the sector to be assessed in terms of positive and negative cultural, environmental and economic impacts" (Blamey 1997). Operators promoting ecotourism products also need to know their target markets. Consumer profiles allow targeting of products to those market segments likely to bring the greatest returns. In short, understanding the concept of and the issues surrounding ecotourism is essential for successful planning, development, marketing, and management of this type of tourism.

[1]Unless stated otherwise, all dollar amounts are Canadian.

Ecotourism is well established in the developing countries (de Groot 1983; Dearden 1989; Boo 1990; Fennell and Eagles 1990), and destinations such as Costa Rica, Indonesia, and the Galapagos Islands have become synonymous with ecotourism. However, the principles of ecotourism are now being applied in small communities in developed countries such as Australia, New Zealand, the United States, and Canada. Much of this growing interest in ecotourism in developed countries can be attributed to its economic potential and its links with sustainable development.

The Attractions of Ecotourism

There are several reasons why ecotourism has attracted local and national governments, commercial operators, and conservationists in Canada and other countries both developing and industrialized. First, it provides an incentive for governments to expand protected areas and for private landowners to conserve their lands. It offers an alternative source of income for local communities, which can thereby diversify their economies with minimal additional impacts on the landscape. In these ways, ecotourism appeals to both conservationists and community leaders. Second, ecotourism's emphasis on local resources and employment and its tendency to operate in peripheral regions make it attractive to small rural communities, where economic conditions are often depressed and high rates of underemployment and out-migration are chronic (Weaver et al. 1995). Third, its emphasis on local ownership implies fewer leakages from the economy. In contrast, national or international companies often set up in communities and take away a portion of the income generated there. Fourth, it requires less development and less investment, and involves fewer cultural and environmental disruptions than other forms of tourism, although services and infrastructure are required to make it economically beneficial (Boo 1990). Fifth, ecotourism can promote beneficial linkages within a diverse, integrated economy. Finally, ecotourists tend to stay longer, spend more per day than the typical tourist, and seek out local goods and services for consumption (Ecotourism Society 1998). In short, ecotourism exploits tourism's potential for conservation and development and averts its negative impact on ecology, culture, and aesthetics, all of which make it appealing to various groups.

Constraints on Ecotourism Development

Despite ecotourism's environmental, economic, and social appeal, it can lead to problems. Ecotourism activities take place in natural areas, many of which are easily damaged. Therefore, if capacity is exceeded or management of the resource is inadequate, ecotourism may cause more harm than good. Fennell (1999) and Cater (1994a) cited several examples of the negative impacts of ecotourism, such as fragile coral reefs being threatened by the presence of too many divers and cultural and archaeological ruins crumbling because of excessive numbers of visitors. Such damage often occurs when tour operators put their own short-term interests ahead of those of the natural environment and local communities. In addition, some tour operators misuse the term ecotourism to cash in on current consumer interest in this area.

Another potential problem is that the expectations of ecotourists may conflict with the reality of local lifestyles and priorities, which might include hunting or other consumptive activities not supported by the ecotourist philosophy (Weaver et al. 1995). For example, the great flocks of snow geese and other migratory fowl that attract ecotourists to the prairies are perceived as pests by some farmers. Furthermore, what ecotourists view as unspoiled and authentic may be seen by locals as underdevelopment.

Objective and Outline of Report

Many researchers agree that the term "ecotourism" has been used to mean various other types of tourism and that it is increasingly being used without a clear understanding of the concepts and criteria that distinguish ecotourism from other kinds of tourism and development (Botrill and Pearce 1995; Scace 1992; Thomlinson and Getz 1996). Our aim in this report is to explore the concept of ecotourism and clarify its meaning. To do so, we first present a brief history of ecotourism, and then survey the various expert and academic definitions that appear in the literature. We then examine the difficulties in formulating a concise, precise definition of ecotourism. The report also presents an examination of ecotourism as a product and market segment, including a review of the

market profile of ecotourists. We suggest criteria for successful ecotourism based on the definitions in the literature and examine applications and practices of ecotourism, with an emphasis on Canadian ecotourism studies.

LITERATURE REVIEW

The literature on ecotourism is so dense that several attempts have already been made to disentangle the multitude of issues and debates into distinct viewpoints. Botrill and Pearce (1995) classified the literature according to perspectives that they felt represented the three main ecotourism players: participants, operators (or suppliers), and resource managers (responsible for planning and protection, i.e., conservation). In their view, the literature focusing on the participant perspective treats ecotourism as a product or market segment. Consequently, it examines the motives, education, behavior, and participation of ecotourists. The literature that focuses on operator and resource manager perspectives stresses guidelines, with an emphasis on environmental impacts for the resource manager. In contrast, Blamey (1997) classified the literature into normative, descriptive, and supplier-oriented perspectives. Thomlinson and Getz (1996) discussed two general perspectives: ecotourism as a resource management philosophy (based on the principles of sustainable development) and ecotourism as a marketing strategy for developing destinations. Similarly, Wight (1994) found two prevailing views in the ecotourism literature: one using the public interest in the environment to market it as a product and the second using the same interest to conserve the resources upon which this product is based. These two perspectives were supported by Ziffer (1989), who argued that the marketing language of travel should be disentangled from the conservation and development concepts of ecotourism. In an attempt to make the literature more manageable, Fennell and Eagles (1997) put forward a conceptual framework. They classified the literature according to issues or concepts related to visitors (demand) and the service industry (supply). The literature in the first category deals with marketing, visitor management, and visitor attitudes, whereas that in the second category deals with tour operation, resource management, and community development. These categories are not necessarily mutually exclusive and in many cases overlap, but they do provide a way of organizing the abundance of literature on this topic.

As the potential economic benefits of ecotourism are being realized, tour operators and marketing officials are increasingly using the concept of market destinations. Consequently, it can be said that ecotourism has evolved from a set of principles focusing on ethics and conservation to become a product and market segment. The literature related to this view of ecotourism is thus more focused on demand characteristics, with empirical modeling and ecotourist profiles gaining increasing popularity among researchers (Palacio and McCool 1997; Ecotourism Society 1998).

The ecotourism phenomenon has attracted many parties: environmentalists, tour operators, small community planners, government and aid agencies, and tourists. This diversity has resulted in literature addressing the issues important to these different players. Hence, the definition of ecotourism also differs, depending on the perspective being taken. Therefore, a precise and consistent definition of ecotourism is probably unattainable.

Definitions of Ecotourism

There is a wide range of definitions of ecotourism in the literature and, depending on which perspective is taken, different issues and concerns are emphasized. For example, when ecotourism is viewed from the "product" perspective, its sustainability aspects are not usually addressed. More specifically, the characteristics of ecological and sociocultural integrity, responsibility, and sustainability may not be associated with ecotourism as a product (Cater

1994). In the literature focusing on this perspective, profit is often the goal, rather than protection and conservation. Furthermore, ecotourism as product exploits the natural environment, can lead to higher volume of visitors and more development, and may increase economic benefits. This definition of ecotourism differs greatly from the definitions based on environmental and resource management points of view, where the issues of scale and carrying capacity are emphasized. However, even within one perspective, definitions differ. For example, according to Lindberg and Hawkins (1993), impact, not scale, is important. Thus, these authors recommend that impact be addressed in the definition and characterization of ecotourism. Boo (1990) stated that ecotourism involves both small-scale tourism development and low impact.

Table 1 presents some of the most common definitions of ecotourism in the literature. They vary in restrictiveness, depth, and perspective. For example, Boo (1990) used a simple definition that equates ecotourism with nature tourism. Similar definitions have been used by others (Fennell and Eagles 1990; Stewart and Sekarjakrarim 1994). Narrower definitions include those of the Australian National Ecotourism Strategy (Commonwealth Department of Tourism 1994), which specified that ecotourism have its basis in nature, involve education, and be sustainably managed, and Buckley (1994), who added an additional dimension of support of conservation. Less restrictive definitions typically ignore one or more of these dimensions. The two most commonly cited definitions are those of the Ecotourism Society (1993), which emphasizes natural and cultural sustainability, and Ceballos-Lascurain (1983b), which emphasizes the tourist's learning experience and the resulting development of a conservation ethic. However, the original descriptive definition of Ceballos-Lascurain (1987) appears to have evolved into a normative concept (Blamey 1997). Ceballos-Lascurain (1989) later defined ecotourism as a subset of nature tourism. He distinguished ecotourism from other types of nature tourism by its sustainable use of natural resources and its social elements. This approach was reinforced by Ziffer (1989), who stated that "nature tourism is not necessarily ecologically sound. . . . Ecotourism will always refer to the goal of well-managed and constructive nature-tourism." Ziffer (1989) also believed that successful ecotourism can take place only in protected areas. Similarly, Tisdell (1996) distinguished between "environmentally sensitive tourism" and "environmentally dependent tourism," the former referring to ecotourism and the latter coming under the umbrella of "nature-based tourism." Debates continue as to whether ecotourism encompasses all tourism that is environmentally friendly or whether it is limited to activities that make a positive contribution to the cultural or natural environment. Recently, the Canadian Environmental Advisory Council (Scace et al. 1992) proposed a consensus-oriented Canadian definition that incorporates environmental and conservation ethics. This definition is cited in many Canadian-based ecotourism studies and is being implemented by local governments.

Problems in Defining Ecotourism

Several factors make it difficult to identify the best definition of ecotourism for research purposes. The difficulties arise primarily because of the multidimensional nature of the existing definitions and the fact that each dimension (e.g., sustainability or education) represents a continuum of possibilities (Blamey 1997). For example, in considering the nature component of ecotourism (Commonwealth Department of Tourism 1994), questions arise as to what constitutes a nature experience. Could a drive through a forested area or a tour of a reclaimed mine site be considered a nature experience? On a bus tour, must the driver pull over for the trip to count as a nature experience? Does walking through a regenerated forest qualify? Difficulty also arises in establishing whether a particular nature-based activity involves significant "education." Is education defined to occur only if there is a trained guide, or can tourists educate themselves? Does education have to be intentional? Finally, with respect to ecological sustainability, how is low environmental impact defined?

As discussed earlier, the literature is replete with a multitude of definitions (Table 1). Difficulty in precisely defining ecotourism has been further exacerbated by the fact that this term has been linked to many others. For example, Scace et al. (1992) cited 37 terms from the literature that have been linked to ecotourism, ranging from "adventure tourism" to "green tourism."

Table 1. Definitions of ecotourism in the literature

Reference	Definition
Kutay 1989	"Ecotourism is now seen as a model of development in which natural areas are planned as part of the tourism base and biological resources are clearly linked to social economic sectors." (This definition focuses on the vital role of the host country or community.)
Ceballos-Lascurain 1989[a]	"Travelling to relatively undisturbed or uncontaminated natural areas with the specific objective of studying, admiring and enjoying the scenery and its wild plants and animals as well as any existing cultural manifestations found in these areas."
Fennel and Eagles 1990	Local community, resource management, and tour operators are necessary components of an ecotourism development model. (This perspective is most explicit about the merger between conservation and tourism.)
Ziffer 1990	"Goal of ecotourism development would be to attract visitors to natural areas and use the revenue to fund local conservation and economic development."
Boo 1991[a]	"Ecotourism is synonymous with nature tourism. It is nonconsumptive recreation (bird watching, whale watching, wildflower photography)."
Boeger 1991	". . . environmentally sound tourism which respects the dignity and diversity of other cultures as well as the earth's renewable resources."
Ecotourism Association of Australia 1992	"Ecologically sustainable tourism that fosters environmental and cultural understanding, appreciation and conservation."
Norris 1994	Tourism is not ecotourism unless it "clearly integrates both protection of resources with provision of local economic benefits."
Scace et al. 1992	An enlightening nature travel experience that contributes to conservation of the ecosystem while respecting the integrity of host communities.
Ecotourism Society 1993[a]	". . . purposeful travel to natural areas to understand the culture and natural history of the environment, taking care not to alter the integrity of the ecosystem, while producing economic opportunities that make conservation of natural resources beneficial to local people" (later shortened to "responsible travel to natural areas which conserves the environment and sustains the well-being of local people").
Commonwealth Department of Tourism 1994	"Ecotourism is nature based tourism that involves education, interpretation of the natural environment and is managed to be ecologically sustainable."
Buckley 1994	Ecotourism is nature-based, involves education, is managed sustainably and supports conservation.
Eagles 1994	A niche market of sustainable tourism. One of four nonconsumptive forms of sustainable tourism. Involves travel to discover and learn about wild natural environments. Has a strong focus on learning and discovering nature.
Tickell 1994	"Travel to enjoy the world's amazing diversity of natural life and human culture without causing damage to either."
Blamey 1997	"An ecotourism experience is one in which an individual travels to what he/she considers to be relatively undisturbed natural area and is more than 40 km from home, the primary intention being to study, admire or appreciate the scenery and wild plants and animals as well as existing cultural manifestations found in the area."

[a] Most commonly cited definitions.

Further definitional difficulties can be attributed to the sustainability criteria (environmental, educational, and cultural) that characterize ecotourism. The concept of sustainability remains unclear among researchers and planners, although environmental sustainability within the context of ecotourism can be assumed to refer to issues of carrying capacity and scale. Carrying capacity has been defined as "a way to conceptualize the relationship between intensity of use and the management objectives for a resource area" (Farrell and Runyan 1991).

Hawkins (1993) and Thomlinson and Getz (1996) believed that ecotourism involves minimum visitor density and low-impact activities, although they left the definition and measurement of low impact unclarified. In its publication *Sustainable Development: Guide for Local Planners*, the WTO (1993) stated that ecotourism activities are "small scale and do not require high capital investment but must be carefully controlled and fit well into the environment." For purists, only environmentally conscious tourism at low visitor volume is true ecotourism. According to this strict definition, visits to Amboseli National Park in Kenya, which receives approximately 250 000 tourists per year, do not constitute ecotourism. According to the Ecotourism Society (1998), consideration of ecotourism in management terms rather than rigid terms of scale has led to a shift from a definition that specifies small-scale nature tourism to a set of principles applicable to any nature-related tourism. The current philosophy, then, is to look at environmental and cultural impacts rather than scale.

In short, there appears to be no quick fix to the problem of identifying an operational definition of ecotourism. Different definitions will be suited to different circumstances, and compromises will have to be made. The choice of definition is hence inherently subjective (Blamey 1997). In our attempt to define the term, we identified a range of criteria and characteristics of ecotourism, as well as associated activities (Tables 2 and 3). The characteristics in Table 2 are based upon existing definitions, and the activities presented in Table 3 are classified in three categories: activities that constitute a form of ecotourism or closely associated activities, activities not usually associated with ecotourism, and neutral activities, that is, activities that could be associated with a variety of tourism types (Weaver et al. 1995).

In the literature, ecotourism activities are usually characterized by their nonconsumptive nature, whereas consumptive activities (e.g., hunting and fishing) are classified as unrelated to ecotourism. However, this distinction has fueled much debate. For example, it is not clear whether catch-and-release fishing should be classified as ecotourism. Snowmobiling is usually not classified as ecotourism, because it involves motorized vehicles, which disturb the environment. MacIntosh et al. (1995) cited the following as examples of ecotourism: adventure travel that uses the body and environmental or ecological travel that focuses on environmental awareness, protection, and recovery, such as trail cleanup and rain forest tours. The question of whether these activities constitute ecotourism has been debated because the criteria and characteristics of ecotourism are variable. Classification of activities depends largely on what definition is being used, it relative breadth, and the relative weight or emphasis of various criteria. For example, from a conservation or protection perspective, the impact criterion may be more important than the learning component. Thus, even though an activity may be appropriate and may have a high educational component, if it is deemed to generate an unacceptable level of environmental impact, it may be disqualified as an ecotourism activity. This example clearly illustrates the difficulties in defining ecotourism and raises the question of what defines acceptability. What may be an acceptable impact within one definition or for one interest group may be deemed unacceptable by another. Defining ecotourism and associated activities thus becomes highly subjective.

Table 2. Characteristics of ecotourism (Ceballos-Lascurain 1989)

Requires a unique, accessible natural environment (protected or nonprotected)
Promotes positive environmental ethics and fosters "preferred" behavior in its participants
Does not degrade the resource and does not involve consumptive erosion of the natural environment (by this definition, hunting and fishing would be classified as adventure tourism and not ecotourism); ensures long-term security of the land base
Concentrates on intrinsic rather than extrinsic values; facilities and services may facilitate the tourist's encounter with the intrinsic resource but never become attractions in their own right and do not detract from the resource
Is oriented around the environment in question and not around people
Benefits the wildlife and the environment
Provides first-hand encounter with natural environment and with any cultural elements found in the undeveloped areas
Actively involves local communities in tourism
Level of gratification is measured in terms of education and appreciation rather than thrill-seeking or physical achievement
Involves considerable preparation and demands in-depth knowledge on the part of both leaders and participants
Requires training of tour operators, field guides, and other operators
Provides employment and entrepreneurial opportunities for local people

Table 3. Vacation and leisure activities and their relation to ecotourism

Related to ecotourism	Not related to ecotourism	Neutral
Wildlife viewing	Fishing	Touring
Canoeing	Hunting	Boating
Hiking	Snowmobiling	Camping
Cross-country skiing	Ice fishing	Horseback riding
Cultural activities (e.g., Aboriginal)		Cycling
Study or research (e.g., whale watching)		Vacation farm
Viewing northern lights		Rafting
Covered wagon tours		Dog sledding
Historic tours		Swimming
Photography		Fossil hunting
Botanical study		Catch-and-release fishing

ECOTOURISM AS A PRODUCT AND MARKET SEGMENT

In this section, we discuss another important, yet contested, aspect of ecotourism, namely, the market for this type of tourism and the profile of the ecotourist. A market segment consists of consumers who respond in a similar way to a given set of marketing stimuli (Kotler et al. 1994). It has been claimed that ecotourism can be considered a segment of the nature-based tourism market, offering high growth and being more environmentally responsible than other forms of nature-based tourism. The current consensus is that ecotourism has become a market segment and a product because of the demand for vacationing in unspoiled areas and the increased desire to learn more about different cultures and environments. When ecotourism is considered as a market segment and product, the goal is profit, in contrast to the more traditional goal of protection.

The Ecotourism Market

Estimating the size of the ecotourism market is not easy because of the lack of a precise definition of this type of tourism. Furthermore, few countries collect adequate statistics to determine the size of the ecotourism industry, and there are no reliable statistics for the magnitude or growth of the global ecotourism industry. This lack of data can be attributed both to the lack of a universally accepted definition and to the frequent inclusion of ecotourism under more comprehensive labels such as "nature tourism" or "adventure tourism" (Weaver et al. 1995). According to the Ecotourism Society (1998), ecotourism should be considered a specialty segment of the larger nature tourism market. As a result, ecotourism statistics are often based on nature tourism.

Ceballos-Lascurain (1983b) reported a WTO estimate that nature tourism generates 7% of all international travel expenditure. Applying this proportion to the 1994 gross output sales of US$3.4 trillion reported by the WTO yields US$238 billion in "nature tourism" (Lindberg 1994). The World Resources Institute reported that nature travel was increasing at an annual rate between 10% and 30% (Reingold 1993), and the Ecotourism Society (1998) estimated that nature travel would increase annually by 20% to 25% between 1990 and 1995. The proportion of nature tourism revenues accounted for by ecotourism depends largely on how strictly the concept is defined. Filion (1994) and others have attempted to estimate the size of the ecotourism market by using general tourism statistics. For his study, Filion defined ecotourism as "travel to enjoy and appreciate nature." Filion then used data for nature tourists and wildlife-related tourists to estimate the size of the ecotourism market (Tables 4 and 5). The Ecotourism Society (1998) has argued that such data represent nature tourism more than ecotourism. However, these statistics provide a rough indication of the size of this specialty market, even though they may not be completely accurate. According to Filion (1994), 40% to 60% of all international tourists are nature tourists, and 20% to 40% are wildlife-related tourists. These figures are based on an analysis of the motivations of inbound tourists to different worldwide destinations.

Using a very conservative definition, the World Heritage Travel Group estimated the value of ecotourism for European and North American travelers at US$3 billion for 1990. This is triple the 1985 value (Hilderman Witty Crosby Hanna and Associates 1992). Ziffer (1989) supported a 20% annual growth rate for the late 1980s, but estimated that Americans were spending at least US$12 billion per year on international travel for ecotourism. The size of this estimate implies that a more liberal definition of ecotourism was used.

HLA Consultants and ALA Consulting Group (1995) studied tourism market demand in selected Canadian and US markets. In that study, ecotourism was defined as "vacations where the traveler would experience nature, adventure or cultural experiences in the countryside." The ecotourism market in only seven major cities was estimated at 13.2 million travelers. The report suggested that British Columbia and Alberta might have 1.6–3.2 million visitors from these markets. The report also stated that if only 5% of the potential market were to visit British Columbia and Alberta over the next 5 years, the additional revenue would be in the

order of $176 million to $352 million for the two destinations combined.

According to Weaver et al. (1995), anecdotal statistics provide a more reliable, though less comprehensive, indication of growth in the ecotourism sector. The study by Hvengaard et al. (1989) at Point Pelee National Park in Ontario is a worthy example. The authors stated that bird-watching (a nonconsumptive ecotourist activity) involved between 20 and 30 million active participants at that time, generating more than US$20 billion in annual expenditures.

Market Profile of Ecotourists

Laarman (1987) distinguished between two types of ecotourists: dedicated and casual. The dedicated ecotourist is typically a scientist or professional specialist primarily interested in nature, and the casual ecotourist combines the nature experience with other attractions not related to the enjoyment and educational benefits of natural areas. Other studies have distinguished ecotourists from other types of tourists on the basis of demographic profile (sex, age, and income), as well as spending and accommodation patterns (Tourism Research Group 1988; Hvengaard et al. 1989; Wiliacy and Eagles 1990; Fennell and Smale 1992; Ballantine and Eagles 1994; Eagles and Cascagnette 1995; Saleh and Karwacki 1996). Table 6 summarizes the profile of ecotourists on the basis of data collected in a survey of North American travel consumers (HLA Consultants and ALA Consulting Group 1994). This profile is supported by the Hvengaard et al. (1989) study at Point Pelee National Park in Ontario and Social Change Media (1995).

Several studies have found that Canadian ecotourists tend to have higher incomes than typical Canadians. Average annual earnings for an ecotourist were between $52 000 and $70 000 (Tourism Research Group 1988; Hvengaard et al. 1989; Wiliacy and Eagles 1990; Fenneli and Smale 1992; Ballantine and Eagles 1994; Eagles and Cascagnette 1995). In 1990 Canadians earned on average $24 000 (Statistics Canada 1991). Bird-watchers at Point Pelee National Park reported an average gross household income of $57 000 (Hvengaard et al. 1989). In her study of 62

Table 4. Estimates of international tourist activity

Year	Total no. of arrivals	No. of nature tourists[a]	No. of wildlife-related tourists[b]
1988	393 million	157–236 million	79–157 million
1994	528 million	211–317 million	106–211 million

[a] "Tourists visiting a destination to experience and enjoy nature" (Filion 1994).
[b] Tourists visiting a destination to observe wildlife (e.g., bird-watchers).

Table 5. Estimated economic impact of international tourists

	International direct economic impact[a] (US$)		
Year	All tourists	Nature tourists	Wildlife-related tourists
1988	388 billion	155–223 billion	77–155 billion
1994	416 billion	166–250 billion	83–166 billion

[a] Money spent on travel by tourists traveling abroad.

ecotourists in Ecuador, Wilson (1987) found that 27% had a family income of $37 500 to $75 000 (median $56 250). The overall income of individuals in these two studies was similar and well above average.

There is a general consensus that the ecotourist is older than the typical traveler. Statistics Canada (1994) reported that the typical Canadian traveler was between 25 and 44 years old. Most studies have placed the ecotourist between the ages of 35 and 55 years, with the majority between 45 and 55 years of age (Tourism Research Group 1988; Hvengaard et al. 1989; Boo 1990; Kenchington and Eagles 1990a; Wiliacy and Eagles 1990; Fennell and Smale 1992; Ballantine and Eagles 1994; Canadian Heritage et al. 1995; Eagles and Cascagnette 1995). However, recent studies have shown that ecotourism is starting to appeal to younger people, probably because more affordable destinations are becoming available (Crossley and Lee 1994). Senior citizens are also becoming interested in this type of tourism (Canadian Heritage et al. 1995).

Reports of the male-female ratio of ecotourists are mixed. Some studies have found more male than female ecotourists (Fennell and Smale 1992), whereas others have reported females outnumbering males (Wiliacy and Eagles 1990; Ballantine and Eagles 1994; Eagles and Cascagnette 1995). Yet others, such as Boo (1990) and Canadian Heritage et al. (1995), found an even ratio.

In general, ecotourists tend to be well educated. Most studies have reported that at least 60% of respondents had at least a bachelor's degree (Tourism Research Group 1988; Hvengaard et al. 1989; Wiliacy and Eagles 1990; Fennell and Smale 1992; Ballantine and Eagles 1994; Eagles and Cascagnette 1995). In contrast, in 1991 only 7.4% of the Canadian population held a bachelor's degree, and only 2.2% held a postgraduate degree (Statistics Canada 1991). Wilson (1987) found that more than 40% of Ecuadorian tourists had university degrees, and more than 10% had doctoral degrees.

According to Blamey (1995), "although interpretation was identified as an important element in a satisfying ecotour, [formal] education was not itself seen as a major motivation in the decision to take an ecotour." This finding can be contrasted with that of Eagles (1994), who suggested that "learning about nature is an important ecotourism motive, but that minimizing negative impacts may not be so." Ecotourists also have a common preference for small groups and a desire to experience something different (Social Change Media 1995). The sustainability component of ecotourism was not found to be a primary motivator for ecotourists. However, that does not necessarily mean that sustainability issues are not important to them. More detailed research pertaining to the motivations and purchasing patterns of ecotourists can be found in Blamey (1995).

Blamey (1997) went further, suggesting that there may be different segments within the loosely defined ecotourism market and hence a need for profiles of the different segments. Blamey and Braithwaite (1997) used social values to segment the potential ecotourism market. Results from their study of the Australian market indicated that most potential ecotourists do not have particularly "green" values, and those with "greener" values tend to be least in favor of park entrance fees. This finding was partly attributed to the tourists' sense of equality and shared responsibility through income taxes.

Table 6. Profile of the ecotourist

High income level
Middle aged (34–45 years old)
Evenly split between males and females, but historically mainly male
Well educated
Takes relatively long trips
Willing to spend more on local goods
Tolerant of primary facilities
Important elements: wilderness setting, wildlife viewing
Motivations for taking trips: to enjoy the scenery, nature, and new experiences

Ecotourism means different things to different people. It fits a range of definitions and agendas. The variations have yielded widely differing results in the experiences of consumers, in the effects of operators' practices on host environments and communities, and in the consequences for heritage conservation (Scace et al. 1992). This section illustrates some of the ways in which ecotourism, as a practice, is being applied internationally and, in greater detail, in Canada.

International Ecotourism

Ecotourism can be applied to almost any natural setting: coastal, marine, rain forests, and farmland. It has been associated primarily with developing countries. Notable examples include Costa Rica, with its rain forests, Belize and Koh Phi Phi National Park of Phuket, Thailand, with their coral reefs, the Galapagos Islands with their unique animals, and Kenya with its wildlife. Furthermore, in the less developed countries, ecotourism has usually been applied in protected areas such as national parks. The literature focusing on less developed countries as ecotourism destinations is plentiful (Singh et al. 1989; Boo 1990; Goriup 1991; Sherman and Dixon 1991; Weaver et al. 1995; Scace 1993; Fennell 1999; Cater 1994a).

Costa Rica is perhaps one of the best known ecotourism destinations in the world, with about 10 ecotourism sites. Ecotourism development projects are based on its rain forests, which are all in protected national parks. All of the sites make use of the country's unique fauna and flora. One of the most successful privately operated nature sites is the Monteverde Cloud Forest Reserve of Costa Rica (Boo 1990; Steele 1995), which is owned by the Tropical Science Centre. Ecotourism in Costa Rica is a prime example illustrating the benefits of this type of development. It provides local employment in terms of guiding, food production, lodging, crafts (as souvenirs), and transportation. It also demonstrates how the private sector can work with government: the state provides the resource base through the parks and the private sector meets visitors' needs. In 1986, Costa Rica attracted 261 552 foreign tourists, generating much-needed income for the country. Donations to help protect the area have accounted for more than $500 000. Rain forests are being protected while generating income. Few tour operators are licensed, to minimize the effect on social carrying capacity. Temporal restrictions are also in place to minimize the impact on wildlife. Informative and knowledgeable guides are important.

Ecotourism is also being practiced by the governments of Australia and New Zealand (Richardson 1993; Hall 1994), and small-scale rural tourism strategies are being implemented in the United Kingdom and other parts of Europe (Lane 1988, 1991).

Ecotourism in Canada

According to a 1991 survey, 19% of Canadians took trips to engage in nonconsumptive wildlife-related pursuits such as viewing and studying wildlife and photography (Weaver et al. 1995). According to Filion et al. (1993), participants, who are better educated and wealthier than the typical Canadian, had an annual total of 84.3 million activity days, with expenditures of $2.4 billion a year. Filion et al. (1993) also stated that bird-watching and pleasure walking were expected to experience rapid growth between 1986 and 2001, a trend mirroring the situation in the United States. Canada's undisturbed natural environments are conducive to ecotourism. As a result, it has become an important regional economic activity, although at the national level, it is relatively small. In this section we briefly review Canada's contribution to the ecotourism phenomenon.

Bird-watchers in Point Pelee National Park generate up to $6 million annually (Hvengaard et al. 1989). Whale watchers off Vancouver Island generated expenditures estimated at $4.2 million in 1988 (Duffus and Dearden 1990). In 1986, revenues in British Columbia for outdoor adventure tourism, of which nature tourism is a significant part, were about $133.7 million, and over a million visitor-days of service were provided. According to Duffus and Dearden (1990), about 22% of Canadians undertake trips with wildlife viewing as the main goal. Another 45.5% take part in nonhunting, wildlife-oriented activities during trips taken for other

reasons. The economic value of this activity is significant, about $1.0 billion in expenditures from recreational use in 1987. Another report estimated a total of 10.7 million visitor-days per year (by both residents and nonresidents) spent viewing wildlife (Ethos Consulting 1988). Ecotourism in Churchill, Manitoba, is based on polar bears whereas on the Gulf of St. Lawrence it is based on seal pup observation (McArthur 1992; Lenton 1993). It is estimated that $1 million to $1.5 million was generated by the approximately 700 tourists who viewed pups in 1991-1992. After cutbacks and out-migration in the 1960s, ecotourism has helped revive the community. In fact, ecotourism in Churchill occurs throughout the year, with visitors arriving in three seasons: June to early July for bird-watching, July to August for photo safaris, and October to November for polar bear viewing (Weaver et al. 1995). More recently, Churchill and Yellowknife, Northwest Territories, have started to attract tourists coming to view the northern lights (aurora borealis).

Canadian examples of community-based ecotourism initiatives include Haida Gwaii (Queen Charlotte Islands) of British Columbia (Williams 1992), the Inuit community in Baker Lake, Nunavut (Woodley 1993), and the nonprofit Redberry Lake Pelican Project at Hafford, Saskatchewan (Hawkes and Williams 1993). The latter was conceived in 1989. Since then, the project has gained an international reputation as a successful ecotourism prototype, which includes an interpretative center, a network of hiking trails, research activity, ecosystem restoration, and an innovative television monitoring system appropriate for remote colonial nesting sites (Hawkes and Williams 1993; Weaver et al. 1995). Other significant ecotourism enterprises include the guided "buffalo creeps" in Wood Buffalo National Park and the Bathurst Inlet Lodge (in the Northwest Territories), which since the early 1970s has provided opportunities to experience Inuit culture and Arctic natural history (Scace 1993).

Grasslands National Park in Saskatchewan is also a well-known ecotourist destination in Canada (Saleh and Karwacki 1996). This park contains the most extensive prairie vegetation association in western Canada. It acts as a sanctuary for numerous vulnerable, threatened, and endangered species. It also contains important archaeological resources such as dinosaur fossils. The park's infrastructure consists of only visitor facilities and an interpretative center. Other examples of ecotourism in Canada include the Quebec City to Edmundston ecotour and the Rideau Canal in Ontario. In these cases, travelers receive a description of the geological composition of the ecoregion, along with information about bird life (Fennell and Eagles 1997). Rural areas such as farmland are also being used in ecotourism development (Kenchington and Eagles 1990a).

The prairie provinces are gaining a reputation for offering significant ecotourism opportunities. For example, they offer excellent venues for viewing migratory waterfowl. In Alberta, ecotourism has been associated for many decades with Banff and Jasper national parks and with the mountain region in general. Recently, the private sector has been taking advantage of ecotourism opportunities, in the form of farm and ranch ecotourism. This is an entirely new form of ecotourism that has emerged in the past 5 years and has quickly become significant, particularly in the foothills region. Farms and ranches are diversifying their operations to include ecotourism-related activities such as wildlife viewing. The owners of these operations are real farmers who supplement their income with money from visitors who are interested in experiencing life on a working farm or ranch, observing wildlife, and hunting and fishing on private lands (Bryan 1991).

CONCLUSION

In this report, we have presented an overview of ecotourism, its definitions, and the issues surrounding the phenomenon. As worldwide interest in conservation and the protection of natural values has grown, so too has research into ecotourism. A set of criteria for ecotourism development has been outlined. We have also presented the difficulties in precisely defining ecotourism. Among experts and academics, much of the debate about ecotourism occurs at the conceptual and semantic level. We conclude that the definition differs according to perspective. The appeal of ecotourism to planners and governments has been outlined. We have also shown that ecotourism is not restricted to less developed countries. It is a thriving industry in Canada, with much economic and conservation potential. This potential is now being assessed for the Foothills Model Forest, in west-central Alberta. In the next stage of this research, we are examining the differing perspectives of local stakeholders in the Foothills Model Forest who are most affected by ecotourism activity and comparing them with the expert definitions discussed here.

LITERATURE CITED

Ashton, R.; Ashton, P. 1993. An introduction to sustainable tourism (ecotourism) in Central America. Wildl. Conserv. Int., Gainesville, FL.

Ballantine, J.L.; Eagles, P.F.J. 1994. Defining Canadian ecotourists. J. Sustain. Tour. 2(1):1–6.

Berezowski, D.; Berezowski, H. 1998. Changing the bait: operators refo us international tourism strategies. Alta. Ventur. (May):26–30.

Blamey, R. 1995. The nature of ecotourism. Bureau of Tourism Research, Canberra, Australia.

Blamey, R. 1997. Ecotourism: the search for an operational definition. J. Sustain. Tour. 5(2):109–130.

Blamey, R.; Braithwaite, V. 1997. A social values segmentation of the potential ecotourism market. J. Sustain. Tour. 5(1):29–45.

Boeger, E. 1991. Ecotourism and the environment. Travel Tour. Res. Assoc. Newsl. (May):2–6.

Boo, E. 1990. Ecotourism: the potentials and pitfalls. Vols. 1 and 2. World Wide Fund for Nature, Washington, DC.

Boo, E. 1991. Making ecotourism sustainable: recommendations for planning, development, and management. Pages 187–195 *in* T. Whelen, ed. Nature tourism: managing for the environment. Island Press, Washington, DC.

Boo, E. 1993. Ecotourism planning for protected areas. Pages 15–31 *in* K. Lindberg and D. Hawkins, eds. Ecotourism: a guide for planners and managers. Ecotourism Society, North Bennington, VT.

Botrill, C.G.; Pearce, D. 1995. Ecotourism: towards a key elements approach to operationalising the concept. J. Sustain. Tour. 3:45–54.

Bryan, B. 1991. Ecotourism on family farms and ranches in the American West. Pages 75–85 *in* T. Whelen, ed. Nature tourism: managing for the environment. Island Press, Washington, DC.

Buckley, R. 1994. A framework for ecotourism. Ann. Tour. Res. 21:661–669.

Bur, S. 1994. Sustainable tourism development and use: follies, foibles, and practical approaches. Pages 3–7 *in* S.F. McCool and A.E. Watson, compilers. Linking tourism, the environment and sustainability. Spec. Sess., Annu. Meet. Natl. Recreat. Park Assoc., 12–14 Oct. 1994, Minneapolis, MN.

Canadian Heritage, Industry Canada, British Columbia Ministry of Small Business Tourism and Culture, Alberta Economic Development and Tourism, and Outdoor Recreation Council of British Columbia. 1995. Ecotourism—nature/adventure/culture: Alberta and British Columbia market demand assessment. Main Rep.

Card, J.; Johnson Volgelsong, M. 1994. Ecotourism as a mechanism for economic enhancement in developing countries. Pages 57–60 *in* S.F. McCool and A.E. Watson, compilers. Linking tourism, the environment and sustainability. Spec. Sess., Annu. Meet. Natl. Recreat. Park Assoc., 12–14 Oct. 1994, Minneapolis, MN.

Cater, E. 1994a. Ecotourism in the third worldóproblems and prospects for sustainability. A minister's view. Pages 69–86 *in* E. Cater and G. Lowman, eds. Ecotourism: a sustainable option? John Wiley and Sons, Brisbane, Australia.

Cater, E. 1994b. Introduction. Pages 3–17 *in* E. Cater and G. Lowman, eds. Ecotourism: a sustainable option? John Wiley and Sons, Brisbane, Australia.

Ceballos-Lascurain, H. 1983a. Ecotourism planning for protected areas. Pages 15–31 *in* K. Lindberg and D. Hawkins, eds. Ecotourism: a guide for planners and managers. Ecotourism Society, North Bennington, VT.

Ceballos-Lascurain, H. 1983b. Ecotourism as a worldwide phenomenon. Pages 7–11 *in* K. Lindberg and D. Hawkins, eds. Ecotourism: a guide for planners and managers. Ecotourism Society, North Bennington, VT.

Ceballos-Lascurain, H. 1987. The future of ecotourism. Mex. J. (January):13–14.

Christensen, N. 1994. Sustainable community-based tourism and host quality life. Pages 63–68 *in* S.F. McCool and A.E. Watson, compilers. Linking tourism, the environment and sustainability. Spec. Sess., Annu. Meet. Natl. Recreat. Park Assoc., 12–14 Oct. 1994, Minneapolis, MN.

Commonwealth Department of Tourism. 1994. National ecotourism strategy. Australian Government Publishing Service, Sydney.

Crossley, J.; Lee, B. 1994. Ecotourists and mass tourists: a difference in 'benefits sought.' Conf. Rep., Travel Tour. Res. Assoc., Washington, DC.

Dearden, P. 1989. Tourism in developing societies: some observations on trekking in the highlands of north Thailand. World Leis. Recreat. 31(4):40–47.

De Groot, R.S. 1983. Tourism and conservation in the Galapagos Islands. Biol. Conserv. 26:291–300.

Drake, S. 1991. Local participation in ecotourism project. Pages 132–164 *in* T. Whelen, ed. Nature tourism: managing for the environment. Island Press, Washington, DC.

Duffus, D.; Dearden, P. 1990. Non consumptive wildlife-orientated recreation: a conceptual framework. Biol. Conserv. 53:213–231.

Eagles, P. 1994. Understanding the market for sustainable tourism. Pages 25–33 *in* S.F. McCool and A.E. Watson, compilers. Linking tourism, the environment and sustainability. Spec. Sess., Annu. Meet. Natl. Recreat. Park Assoc., 12–14 Oct. 1994, Minneapolis, MN.

Eagles, P.F.J.; Cascagnette, J. 1995. Canadian ecotourists: who are they? Tour. Recreat. Res. 20(1):22–28.

Ecotourism Association of Australia. 1992. Ecotourism news. Brisbane, Australia. Newsl. 1.

Ecotourism Society. 1998. Ecotourism statistical fact sheet. Ecotourism Society, North Bennington, VT.

Ellen, M. 1994. Ecotourism opportunities in the Foothills Model Forest. Univ. Calgary, Fac. Environ. Design, Calgary, AB. Prelim. Rep.

Ethos Consulting Ltd. 1988. Wildlife viewing in British Columbia. Univ. Victoria, Dep. Geogr., Victoria, BC. Unpubl. Rep.

Farrell, B.; Runyan, D. 1991. Ecology and tourism. Ann. Tour. Res. 18(1):26–40.

Fennell, D.A. 1999. Ecotourism: an introduction. Routledge, New York.

Fennell, D. 1998. Ecotourism in Canada. Ann. Tour. 25(1):231–236.

Fennell, D.; Eagles, P. 1990. Ecotourism in Costa Rica: a conceptual framework. J. Park Recreat. Admin. 1(8):23–34.

Fennell, D.; Smale, B. 1992. Ecotourism and natural resource protection. Tour. Recreat. Res. 8(1):23–34.

Filion, F.L. 1994. The importance of wildlife to Canadians: the economic significance of wildlife-related recreational activities. Can. Wildl. Serv., Environ. Can., Ottawa, ON.

Filion, F.L.; Du Wors, E.; Boxall, P.C.; Bouchard, P.; Reid, R.; Gray, P.; Bath, A.; Jacquemt, A.; Legare, G. 1993. The importance of wildlife to Canadians: highlights of the 1991 survey. Can. Wildl. Serv., Environ. Can., Ottawa, ON.

Goriup, P., ed. 1991. Special issue on ecotourism. Parks 2(3):15–28.

Hall, C. 1994. Ecotourism in Australia and the South Pacific: appropriate tourism or a new form of ecological imperialism? Pages 137–157 *in* E. Cater and G. Lowman, eds. Ecotourism: a sustainable option? John Wiley and Sons, Brisbane, Australia.

Hawkes, S.; Williams, P. 1993. The greening of tourism: from principles to practice. Simon Fraser Univ., Cent. Tour. Policy Res., Vancouver, BC.

Hawkins, D. 1993. Ecotourism: a guide for planners and managers. Ecotourism Society, North Bennington, VT.

Hetzer, W. 1965. Environment, tourism, culture. Links (July):1–3.

Higgins, B.R. 1996. The global structure of the nature tourism industry: ecotourists, tour operators and local businesses. J. Travel Res. 35(2):11–18.

Hilderman Witty Crosby Hanna and Associates. 199?. Central Saskatchewan tourism destination strategy. Prepared for Central Regional Tourism Association. Saskatoon, SK. Final Rep.

HLA Consultants and ALA Consulting Group. 1995. Ecotourism—nature/adventure/culture: Alberta and British Columbia market demand assessment. Workshop Rep., February-April 1995.

Hvengaard, G.T.; Butler, J.R.; Krystifiak, D.K. 1989. Economic values of bird watching at Point Pelee National Park, Canada. Wildl. Soc. Bull. 17:526–531.

Kenchington, J.A.; Eagles, P. 1990a. An analysis of the motives of ecotourists in comparison to the general Canadian population. Soc. Leis. 13:499–508.

Kenchington, J.; Eagles, P. 1990b. Ecotourism in Costa Rica: a conceptual framework. J. Parks Recreat. Res. 17(1):21–32.

Kotler, P.; Chandler, P.; Brown, L.; Adam, S. 1994. Marketing: Australia and New Zealand. Prentice Hall, Sydney, Australia.

Kutay, K. 1989. The new ethic in adventure travel. Buzzworm Environ. J. 1(4):30–36.

Lane, B. 1988. Small scale rural tourism initiatives: the role of a British university. Council of Europe, International Organising and Steering Committee of the European Campaign for the Countryside, Strasbourg, France.

Lane, B. 1991. Tourism, planning and the environment: the role of sustainable tourism strategies. International Seminar of Green Tourism, Ovido, Spain.

Lenton, P. 1993. Ecotourism: Canadian destinations for the conscientious tripper. Explore 58:11–15.

Lindberg, K. 1994. Quantifying ecotourismóare reliable statistics in sight? Ecotour. Soc. Newsl. 4(Spring):1–2,7.

Lindberg, K.; Furze, B.; Staff, M.; Black, R. 1997. Ecotourism in the Asia-Pacific region: issues and outlook. Ecotourism Society, Bennington, VT.

Lindberg, K.; Hawkins, D., editors. 1993. Ecotourism: a guide for planners and managers. Ecotour. Soc., North Bennington, VT.

Lindberg, K.; Huber, R. 1993. Economic issues in ecotourism management. Pages 82–115 *in* K. Lindberg and D. Hawkins, eds. Ecotourism: a guide for planners and managers. Ecotourism Society, North Bennington, VT.

MacIntosh, R.W.; Goeldner, C.R.; Ritchie, J.R.B. 1995. Tourism, principles, practices, philosophies. 7th ed. New York, Wiley.

Maille, P.; Mendelson, R. 1993. Valuing ecotourism in Madagascar. J. Environ. Manag. 38:213–218.

Mathieson, A.; Wall, G. 1982. Tourism: economic, physical and social impacts. Longman, New York, NY.

McArthur, D. 1992, Apr. 4. Watching killer whales, harp seal pups are popular pastimes. Globe and Mail [Toronto, ON]; A:10,13.

McCool, S.F. 1994. Linking tourism, the environment, and concepts of sustainability: setting the stage. Pages 1–2 *in* S.F. McCool and A.E. Watson, compilers. Linking tourism, the environment and sustainability. Spec. Sess., Annu. Meet., Natl. Recreat. Park Assoc., 12–14 Oct. 1994, Minneapolis, MN.

Norris, R.D. 1994. Ecotourism in the national parks of Latin America. Natl. Parks 68(1–2):32–37.

Palacio, V.; McCool, S. 1997. Identifying ecotourists in Belize through benefit segmentation: a preliminary analysis. J. Sustain. Tour. 5(3):234–243.

Reingold, L. 1993. Identifying the elusive ecotourist. Tour. Travel News Suppl. Oct. 25:36–39.

Richardson, J. 1993. Australia takes ecotourism route. Ecosyst. Soc. Newsl. 3:1–2, 5.

Romeril, M. 1985. Tourism and the environmentótowards a symbiotic relationship. Int. J. Environ. Stud. 25:215–218.

Saleh, F.; Karwacki, J. 1996. Revisiting the ecotourist: the case of Grasslands National Park. J. Sustain. Tour. 4(2):61–95.

Scace, R.C. 1993. An ecotourism perspective. Pages 59– 82 *in* J.G. Nelson, R. Butler, and G. Wall, eds. Tourism and sustainable development: monitoring, planning, managing. Univ. Waterloo, Herit. Resour. Cent., Waterloo, ON. Joint Publ. 1.

Scace, R.C. 1992. Ecotourism in Canada. Canadian Environmental Advisory Council, Ottawa, ON.

Scace, R.C.; Grifone, E.; Usher, R. 1992. Ecotourism in Canada. Prepared by Sentor Consultants Ltd. for Environ. Can., Can. Environ. Advis. Counc., Ottawa, ON. Unpubl. Rep.

Sherman, P.; Dixon, J. 1991. The economics of nature tourism: determining if it pays. Pages 89–131 *in* T. Whelen, ed. Nature tourism: managing for the environment. Island Press, Washington, DC.

Singh, T.; Theuns, H.; Go, F. 1989. Towards appropriate tourism: the case of developing countries. Peter Lang, Frankfurt, Germany.

Social Change Media. 1995. A national ecotourism education strategy. Commonwealth Department of Tourism, Canberra, Australia.

Statistics Canada. 1991. 1991 census profiles [CD-ROM]. Stat. Can., Ottawa, ON.

Statistics Canada. 1994. Canadian travel survey profile 1994. Stat. Can., Ottawa, ON.

Steele, P. 1995. Ecotourism: an economic analysis. J. Sustain. Tour. 3(1):29–43.

Stewart, W. 1994. Disentangling ecotourism. Ann. Tour. Res. 21(4):840–842.

Stewart, W.; Sekarjakrarim, S. 1994. Disentangling ecotourism. Annals of Tourism Research 21:810–811.

Thomas, D.H.L.; Ayache, F.; Hollis, G.E. 1991. Use and non-use values in the conservation of Tchkeul National Park, Tunisia. Environ. Conserv. 18(2):119–130.

Thomlinson, E.; Getz, D. 1996. The question of scale in ecotourism: case study of two small ecotour operators in the Mundo Maya region of Central America. Journal of Sustainable Tourism 4(4):183–200.

Tickell, C. 1994. Foreword. Pages ix-x *in* E. Cater and G. Lowman, eds. Ecotourism: a sustainable option? John Wiley and Sons, Brisbane, Australia.

Tisdell, C. 1996. Ecotourism, economics and the environment: observations from China. J. Travel Res. 34(4):11–19.

Tobias, D.; Mendelson, R. 1991. Valuing ecotourism in a tropical rain forest reserve. Ambio 20(2):91–93.

Tourism Research Group. 1988. Adventure travel in Canada: western Canada product development strategy. Tourism Canada, Ottawa, ON.

Weaver, D.; Glenn, C.; Rounds, R. 1995. Ecotourism in Manitoba. Prepared by Brandon Univ., Rural Dev. Inst., for Manitoba Rural Development, Brandon, MB. RDI Rep. Ser. 1995–5.

Western, D. 1993. Defining ecotourism. Pages 7–11 *in* A.K. Lindberg and D. Hawkins, eds. Ecotourism: a guide for planners and managers. Ecotourism Society, North Bennington, VT.

Whelen, T. 1991. Ecotourism and its role in sustainable development. Pages 3–22 *in* T. Whelen, ed. Nature tourism: managing for the environment. Island Press, Washington, DC.

Wight, P.A. 1993. Sustainable ecotourism: balancing economic, environmental and social goals within an ethical framework. J. Tour. Stud. 4:54–66.

Wight, P.A. 1994. Environmentally responsible marketing of tourism. Pages 39–56 *in* E. Cater and G. Lowman, eds. Ecotourism: a sustainable option? John Wiley and Sons, Brisbane, Australia.

Wiliacy, S.; Eagles, P. 1990. An analysis of the Federation of Ontario Naturalists' Canadian nature tours programme. Univ. Waterloo, Dep. Recreat. Leis. Stud., Waterloo, ON.

Williams, P.W. 1992. A local framework for ecotourism development. West. Wildlands 18:14–19.

Wilson, M. 1987. Nature-oriented tourism in Ecuador: assessment of industry structure and development needs. US Dep. Agric., For. Serv., Southeast. For. Exp. Stn., Asheville, NC; North Carolina State Univ.; Duke Univ. FPEI Work. Pap. Ser.

Woodley, A. 1993. Tourism and sustainable development: the community perspective. Pages 135–147 *in* J.G. Nelson, R. Butler, and G. Wall, eds. Tourism and sustainable development: monitoring, planning, managing. Univ. Waterloo, Herit. Resour. Cent., Waterloo, ON. Joint Publ. 1.

World Tourism Organisation. 1993. Compendium of tourism statistics 1987–1991. 13th ed. World Tourism Organization. Madrid, Spain.

World Tourism Organisation. 1998. Compendium of tourism statistics 1994–1998. 20th ed. World Tourism Organisation. Madrid. Spain.

Ziffer, K. 1989. Ecotourism: the uneasy alliance. Conserv. Int., Los Angeles, CA.